EnergyPod™

An Office of Electricity Grid Storage Demonstration Project

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DOE Peer Review
San Diego, CA
Oct 20th, 2011

- ✓ Compelling Value
- ✓ Engineered for Reliability
- ✓ Rapid Modular Deployment

PRIMUS POWER
Smart Grid Storage

DOE funding enabled Primus Power to launch our field deployment program

Tier 1 Investors

$11M equity raise in May-11

Chrysalix ENERGY VENTURE CAPITAL

KPCB

I2BF

DBL INVESTORS DOUBLE BOTTOM LINE VENTURE CAPITAL

Intellectual Property

1 US patent issued

11 in process

US and International

Department of Energy
Office of Electricity

$14M Grid Storage Demonstration Project

Follow-on Grants

- $2M ARPA-E: GRIDS Program

arpa·e Advanced Research Projects Agency • ENERGY

- $1M California Energy Commission

Strategic Partnerships

- $B Electrical Conglomerate for technology development
- $B Independent power producer for deployment

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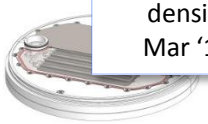
We are on track for our first Energy**Pod**™ field deployment in 2012, with commercial deployments starting in early 2013

Laboratory: 2010 | EnergyCell: 2011 | EnergyPod: 2012 | Shipments: 2013+

Proof of Principle → Technology De-Risk → EnergyCell Development → Testing → EnergyPod™ Development → Reliability Testing → Pilot Production → EnergyFarm Deployment → Field Validation → Contract Production

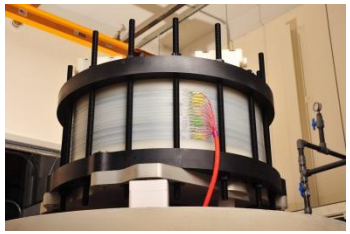
Start Aug '09



✓ Hit high current density target Mar '10

✓ Full scale channel performance Dec '10

✓ Full scale Alpha Energy**Cell** Testing Jun '11



❑ Beta Energy**Cell*** Mar '12

❑ First Energy**Pod**™* field deployment Aug '12

MID Modesto Irrigation District The Power to Grow

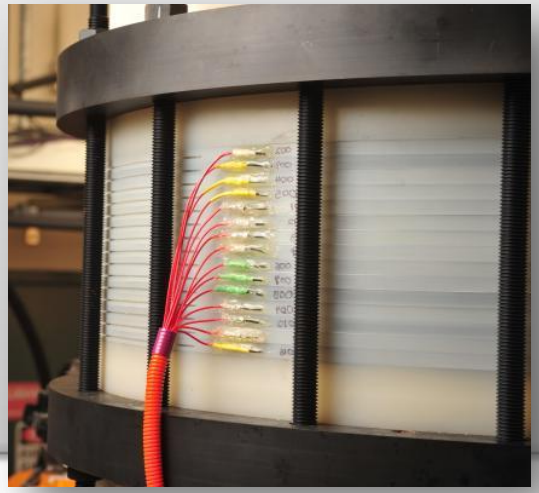
❑ Commercial Energy**Pod** shipments start early 2013

* A string of EnergyCells is installed into an Energy**Pod**™

PRIMUS POWER Smart Grid Storage

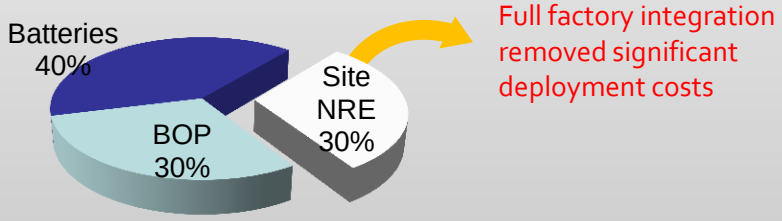
Extensive reliability engineering coupled with redundancy through Play & Play modularity yield 24/7 field performance

- ✓ over 100 man.years of flow battery experience
- ✓ unique flow battery product
- ✓ MTBF of 36 years
  - industry-leading compatibility of all structural and active materials
  - elimination of all typical flow battery failure modes
  - extensive FMEA analysis and critical component redundancy



- Primus Power's ***Molecule to Megawatts™*** approach to system engineering has created a modular design that enables
  - full factory integration & testing
  - rapid deployment
  - minimal site engineering
  - system capacity flexibility throughout the life of the deployment
  - reduction of maintenance to annual inspections & service

Traditional System Costs



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Energy**Pods**™ enjoy cost, operational, emissions and installation advantages over traditional fossil fuel solutions

	Traditional Fossil Fuel Solution	**Primus Power** Energy**Pods**™
Firming range	4 to 50 MW	-25 MW to 25 MW
Capital cost	$78M	<< $78M
Time to full power	5 minutes	5 seconds
Water in	560,000,000 liters	0
Sewage out	560,000,000 liters	0
Natural gas	2,900,000 mmBTU	0
Pollutants	NOx 37 tons CO 130 tons VOC 130 tons	0
CO_2 emissions	130,000 tons	0
Sound (at the fence)	80 dB	<30 dB
Permit and install time	36 to 54 months	6 to 12 months
Area	1 acre	¼ acre

PRIMUS POWER Smart Grid Storage

Annual data, based on 35 MW average use

Summary

- DOE's Office of Electricity has facilitated the productization of Primus Power's engineering innovations
- We're on schedule for field deployment in 2012
- The Energy**Pod**™ is engineered to be a reliable, emissions-free product
- The Energy**Pod**™ is economically competitive and commercially attractive
- We are working closely with utility and industry partners to deploy multi-MW EnergyFarms in 2013 and 2014

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